

PROPOSED CLAIM AMENDMENTS
(09/512,736)

A. Pending claims with proposed amendments indicated:

53. (Amended three times) A plant cell containing:

(a) nucleotide sequence encoding an immunoglobulin product comprising
at least a portion of the variable region of an immunoglobulin light chain and a leader sequence
forming a secretion signal, said light chain derived from an antigen-specific immunoglobulin
comprising a heavy and light chain and;

(b) immunoglobulin product encoded by said nucleotide sequences
wherein said leader sequence is cleaved from said immunoglobulin light chain following
proteolytic processing, said light polypeptide product being capable of forming an antigen-
specific immunoglobulin when co-expressed in [~~the same~~] a plant cell with said heavy chain
from said antigen-specific immunoglobulin wherein said plant cell does not contain said
immunoglobulin heavy chain polypeptide.

56. The plant cell of claim 53 wherein the immunoglobulin product comprises a full-length immunoglobulin light chain.

63. The plant cell of claim 53 wherein the plant cell is from a dicotyledonous plant.

64. The plant cell of claim 53 wherein the plant cell is from a monocotyledonous plant.

65. The plant cell of claim 53 wherein the plant cell is from an alga.

67. The plant cell of claim 53 wherein said immunoglobulin light chain variable region is a full length variable region.

68. The plant cell of claim 53 wherein said nucleotide sequence also encodes at least a portion of the constant region of an immunoglobulin light chain.

76. A plant comprising the plant cell of claim 53.

B. Proposed new claims:

77. (New) A plant cell containing:

(a) nucleotide sequence encoding an immunoglobulin light chain product comprising an antigen specific light chain variable region of an immunoglobulin light chain and a leader sequence forming a secretion signal and;

(b) immunoglobulin light chain product encoded by said nucleotide sequences wherein said leader sequence is cleaved from said immunoglobulin antigen specific light chain variable region following proteolytic processing, said light chain product being capable of assembly in a plant cell with an immunoglobulin heavy chain polypeptide to form an antigen-specific immunoglobulin, wherein said plant cell does not contain said immunoglobulin heavy chain polypeptide.

78. The plant cell of claim 77 wherein the immunoglobulin light chain product comprises a full-length immunoglobulin light chain.

79. The plant cell of claim 77 wherein said nucleotide sequence also encodes at least a portion of the constant region of an immunoglobulin light chain.

80. The plant cell of claim 77 wherein the plant cell is from a dicotyledonous plant.

81. The plant cell of claim 77 wherein the plant cell is from a monocotyledenous plant.

82. The plant cell of claim 77 wherein the plant cell is from an alga.

83. A plant comprising the plant cell of claim 77.